



Technology-Enhanced EFL Syllabus Design and Materials Development

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Abstract

In this paper, I am going to look at the issues of TESOL from one major critical point of view: How the use of the Internet technology might influence TESOL syllabus design and materials development. The article attempts to investigate some possibilities and opportunities provided by the Internet, focusing on the World Wide Web (WWW) as credible ways to access up-to-date and authentic language resources and materials for language teachers and learners of a foreign language. Besides, some challenges caused by the application of the new technology into language education for Vietnamese syllabus designers are addressed. Accordingly, the Vietnamese context is tentatively kept in view throughout these discussions. It is argued that technology can enhance the quality of syllabus design and material development, and that though the focus of problems and challenges is on the particular Vietnamese social setting, there is no reason in which the concerns considered cannot be shared in other relevant milieu.

Keywords: Internet technology, EFL, Syllabus design, Materials development

1. Introduction

We are now living in an era of booming information and technology, the influences and effects both positive and negative of which on education are obviously unavoidable. The traditional language classroom is slowly changing with the advances and increasing uses of technology. Internet-based and Internet-enhanced learning and teaching is now available in most secondary, vocational and tertiary educational institutions in many countries. Language teaching and learning via the Internet has experienced a remarkable increase in many parts of the world. To date, learning English through computer mediated instruction and becoming electronics literate through learning English is the trend in many foreign language learning and teaching programs. A thorough understanding of technology-enhanced learning processes is precisely essential for not only educators but language teachers as well. Hence, language specialists, by minimising potential challenges, need to capitalise on the advantages and strengths that this technology has to offer.

2. Pedagogical Characteristics of the Internet Technology

It is first of all necessary to examine the pedagogical characteristics and TESOL-related features of the Internet technology. As for learners, the Internet with predesigned automated systems first offers immediate feedback (Healey, 2001). Students do not have to hunt for an answer key or wait for the teacher to return marked assignments to know if they understood the material. Second, student learning can be individualized with the help of the Internet. Management systems in software automate the process of letting students proceed at their own pace through material (Warschauer & Whittaker, 2002). Third, multiple learning styles are more easily supported. Often, similar material is available in text, graphical, audio, and video format. All of these can be accessed in one place, on the computer, rather than having to bring in books, tapes, and VCRs. Another characteristic is that students are more motivated by using computers and talking live to others using state-of-the-art technology from email, chat, MUDs, MOOs, and WOOs to SMS, video conferencing (Kern, 2006), as well as recently wikis, blogs, and Web 2.0 as emerging technologies in language learning (Godwin-Jones, 2008). All of the positive aspects of technology create more both intrinsic and extrinsic motivation for students. Besides, learning can be anytime and anywhere. The Internet does not close; people who have software and computers at home can work at their convenience. Last but not least, this is 21st-century learning style, preparing students for 21st-century jobs. As more jobs require knowledge of computers and the Internet, it makes sense for schools to be using technology in teaching and learning so students are very familiar with the technology when they enter the job market. For Warschauer (2004a), it is 15 years ago that the computer was considered just as a tool; it is not an end to itself but a means for learning English. English is nowadays not an end of itself; it is regarded as a tool for being able to use computer and get information on the Internet.

Li and Hart (2002) proposed two major pedagogical promises conferred by the Internet technology on teachers. First, more authentic material is easily available for language teaching and learning provided by the computer network technology as resource retrieval. Foreign language teachers do not need to wait for two weeks or more for the latest foreign language newspaper or magazine - today's issue is online now. What learners are looking at online is the same as what native speakers are reading online. In other words, the availability of authentic material, with up-to-the-minute information (Walker, Hewer, & Davies, 2008), is seen as the most obvious pedagogical advantage of the Internet technology. The Internet is a living thing. This means that there are endless possibilities for using it. The Internet has vast resources for language teachers, which can be accessed through various, and constantly improving search tools (Felix, 2005; Healey, 2001).

Conversely, the computer networks also offer various opportunities for the academic who wishes to mount pedagogical material via the Internet (Coiro, Knobel, Lankshear, & Leu, 2008). Teachers can, for example, create a personal home page - a focal point for students to come, detailing course times and changes, reading lists, and so on. They can also publish lecture notes and handouts or design courseware unique to web involving interaction and feedback (Walker et al., 2008). In many ways, this presents the pedagogical use of the Internet as it includes productive utilisation of HTML, DHTML and XML. Besides users-friendly Microsoft FrontPage, Macromedia Dreamweaver and Hot Potatoes <www.hotpotatoes.net>, teachers with advanced skills of computer technology can create high level interactivity in language learning using a variety of software, such as Tool Book <www.sumtotalsystems.com/toolbook>, Multimedia Builder <www.mediachance.com> and Question Tools <www.questiontools.com/>.

Second, constructivism and sociocognitive psychology which are brought to us by Piaget (1932), and later Krashen (1985) is facilitated by the Internet technology. Constructivist learning - the idea that teachers should offer data and hands-on experience for students so they can create meaning for themselves - is easier to design and set up electronically than using other media. Given these ideas about constructivism, experiential learning can be less demanding with electronic media because large amounts of data are available and students can easily build and revise electronically.

Furthermore, recent lines of inquiry incline to shift attention to the application of the internet technology into classroom practice from a sociocultural perspective as a theory of learning (Thorne, 2008b). From a sociocognitive angle (Vygotsky, 1981), language instruction has been regarded not only in terms of providing comprehensible input, but also in terms of helping students enter into the kinds of authentic social discourse situations and discourse communities that they would encounter outside the classroom. This interdisciplinary and socially informed approach sheds light on the role of social interaction in creating an environment to learn language, learn about language, and learn through language (Warschauer, 1997). The Internet, in this sense, provides alternative contexts for social interaction where learners can work with text or negotiate meaning with peers and teacher, facilitating access to existing discourse communities and the creation of new ones (Kern & Warschauer, 2000).

Syllabus design and materials development are mutually inclusive. While the syllabus defines the goals and objectives of a course, the instructional materials put flesh on the bones (Nunan, 1991). A particular syllabus formally consists of three very vital factors: the teacher, the students and the materials (Figure 1). The discussion below is about how the Internet technology affects and modifies the roles of these factors in the context of TESOL.

3. How does the Internet technology influence the EFL syllabus design?

The Internet is believed to have much influence on foreign language syllabus design in the norm that it may change the roles of the teacher as well as the students (Harben, 2001; Larsen-Freeman & Freeman, 2008) so far as some of the authority and power is transferred to the learners. First of all, it can be seen that the roles of the teacher as provider of information and the student as receptacle thereof have shifted radically. The students, through their self-access internet facilities, have access to huge amounts of information and, unlike the teacher, have more free time to explore it. With the Internet, learners will be more independent as active shapers of the knowledge they obtain and the information they process. This supports one of the ten principles on ESL critical pedagogy (Table 1) by Crookes and Leher (1998), stating that "[T]he purpose of education is to develop critical thinking by presenting students' situation to them as a problem so that they can perceive, reflect, and act on it" (p. 321). The Internet can be tremendously liberating for both teacher and students, and therefore significantly affects the syllabus of a course.

Second, in many cases students are IT experts well ahead of their teachers, especially the senior ones. This entails the expanding responsibility that the teacher must have in encouraging students to think about what they are learning and why they are learning it. Also, students need to develop critical skills in order to use information fully and significantly, and teachers must be able to train them in these skills. Pennycook (2001) used the term *critical literacy*, proposing a new English curriculum in which students must develop not only knowledge of text content but also knowledge about texts and text genre.

Finally, the counselling role of the teacher is expanding as learners confront the need to make decisions about their learning. With the new role of language counselling, teachers must now develop the traditional guidance to incorporate a far greater number of tasks and a sequence in which they can be completed which best suit a student's needs, both cognitive and affective. In this view, "the teacher participates as a learner among learners" (Crookes & Leher, 1998, p. 321). In other words, language counselling involves teacher and student negotiating learning goals and paths.

In general, the Internet means very much to learner-centred model because they are both a learning and a teaching tool. By transferring to students much of the responsibilities for accessing, sequencing and deriving from information, the Internet provides an ideal learner-centred environment in which "students possess the right and power to make decisions" (Crookes & Leher, 1998, p. 321). The teacher becomes something like more an older, more experienced partner in collaboration than an authenticated leader (Landow, 2006). In this pedagogical environment, teachers are encouraged to portray themselves in polylogic rather than monologic roles.

However, Laurillard (2008, p. 144) argued that

Technology is certainly part of the problem here, as it impacts increasingly on the conduct of education. It is new, ever-changing, expensive, difficult to master, complex to manage, wide-ranging in its potential, disruptive of existing systems. And although there is usually funding for the hardware and infrastructure, there has never been,, commensurate funding for staff development, training, content development and research.

Admittedly, there are some drawbacks and problems to consider when using the Internet in designing a syllabus. Anyway, it is clear if we are in favour of the argument that that education must aim at teaching people to gather information from an extensive variety of sources, and to integrate what they have gathered into a coherent whole so that it becomes knowledge, then the Internet is a useful medium to achieve this aim. Therefore, language teachers are ought to bear in mind the educational advantages and challenges of the Internet in order to regulate the teaching programmes to meet the learners' needs.

4. How does the Internet affect the materials development?

Many Vietnamese EFL teachers and learners as well as other non-English native countries often comment on feelings of the lack of and difficulties in finding authentic resources and materials (Kilickaya, 2004) for their teaching and learning. It is, therefore, necessary to explore some possibilities and opportunities provided by the Internet with the focus on the WWW as reliable ways to access authentic and up-to-date language resources and materials for EFL teachers and learners.

Since the Web provides an unlimited panorama of engaging in authentic and multimedia English materials and there are tremendous search capabilities of the Web, which allow instant access to up-to-date information on just about any topic imaginable, EFL teachers can explore and select relevant materials to fuel their class discussions by exposing their students to real tasks of future professions. These kinds of authentic tasks not only develop the learners' language skills, but also contribute to cultural understandings of various polities where English is used as an ENL, ESL or EFL. There are always many quick, easily accessed language-learning materials that provide latest information on different topics and themes for those teachers who do spend time and effort on browsing them on the WWW. [Http://www.ilovelanguages.com/](http://www.ilovelanguages.com/) is an example that offers a wealth of opportunities for language teachers to open up a wide range of lesson activities not only for practical skills like reading, writing and speaking, but for many culturally based activities for training interpreters and translators as well. Teachers of English at the College of Foreign Languages (CFL) of the University of Danang - Vietnam have started the routine of exploiting all possible opportunities using the WWW like <http://www.eslcafe.com/> to access the latest and authentic resources and materials in their teaching programmes. Actually, teachers may obtain ideas and resources from Websites to use more or less directly in their teaching at different levels, ranging from designing a programme, developing a curriculum, or planning lessons. A recent English teaching material, "Internet English" by Gitsaki and Taylor (2000) is a good example of the combination of learning English and learning how to use the Internet in a single lesson plan.

The challenge for language teachers is to integrate knowledge of teaching and learning strategies with an understanding of the features of the WWW, and to design appropriate lesson activities that meet the learners' needs. There are a number of features of the WWW which might be used for teaching and learning. Perhaps, hypertext and hypermedia are major ones as they have the potential for developers to create links between text and other media not only within an individual document but also between documents residing on any computers in the world which have access to the Internet. Alexander (1995) proposed four approaches to using these Web features for teaching and learning: first, to create documents which contain hypertext/hypermedia links; second, to use hypertext programming in order to take advantage of the interactivity - a capability which it is claimed provides useful strategy for active learning; a third approach is to use the hypertext/hypermedia links on the Web to encourage learners to become collaborative authors. Finally, the fourth approach is to make use of a range of Internet services so that an integrated learning experience is realised.

5. Possible Problems and Suggested Solutions

Firstly, when it comes to curriculum problems, a lot of class time may have to be spent teaching students, especially those from the disadvantaged background, how to use the computer and software which will take time away from the focus of the class. If it is a writing class, for example, the more time spent on teaching computer skills means less time teaching composition. Harrison (1998) recommended that establishing a required course for incoming freshmen be a good sample way to solve this problem. Furthermore, looking at larger curricular issues, there are many interesting things teachers can do on the Internet, but do they fit with their curriculum? If a curriculum is an academic one, which focuses on accuracy, then perhaps using blogs or wikis, with its informal use of language and punctuation and its relaxed attitude toward typos may not be the best use of the Internet for the class, for instance. Instead, teachers may want to use the Internet for more formal help, such as the Purdue On-line Writing Lab <<http://owl.english.purdue.edu/>>.

Secondly, as far as student problems are concerned, not all the information available on the Internet is desirable, appropriate or even relevant (Trotman, 2000) to students' studies. Much media attention has been focused on the availability of pornography on the Net, but there are also other problematic areas, such as texts containing racist propaganda. There is software on the market such as Surf Watch or Sex Reminder that to an extent assists parents and educators in protecting students against undesirable or less tasteful material, but it is not foolproof. Other software can trace an individual's 'footprints', so that the pages having been visited can be monitored. However, it is just a fact of life that censorship on the Internet is unenforceable. When the Internet is used in the classroom, there should be careful supervision.

Student attitudes and aptitudes should also be considered. Some students either do not like working with technology or do not have a "knack" for it (Nguyen, 2008). This problem needs special sensitivity on the part of the teacher or administrator. Perhaps circulating a computer attitude questionnaire at the beginning of the course to see if there are such students in the class would be a good way to address the problem. Any student indicating some apprehension could be given extra attention. In addition, providing an adequate computer orientation would help these students.

Another major problem related to students is that of copyright and plagiarism (Warschauer, 2004b). The Internet offers an excellent alternative to the library with its perhaps limited collection. However, the downside is that it is easy with the Internet, as with all electronic reference sources, to cut and paste with minimum effort, making it much easier to plagiarize. Extra care should be made to give students a clear explanation of what constitutes plagiarism, and how to avoid it. There is also a programme called Plagiarist Finder that helps teachers find out if this crime should be committed.

As with all technology-based pedagogy, there is bound to be technical problems. The problem with slow access to the Web because of physical limitations on the institution's connection to the Net is an example. The information highway may in no time be congested and the Internet will become a *paradise* for World Wide Wait. This means that the entire class may either not be able to access the Internet at the same time or that downloading may be exasperatingly slow. Teachers need to understand that technical problems are a fact of life in the CALL classroom, so they must have alternate lesson plans, as plan B, available when these problems occur. It is suggested, in the case of not-so-fast Internet connection like in Vietnam, that materials collected by the teacher could be provided on a designated *Internet computer*. Most Web browsers accompanied by HTML 5 with its new feature (Godwin-Jones, 2008) provide a basic way to either copy Websites from the WWW or support local database to be saved locally in the Internet computer. Furthermore, a free program like WebReaper <www.webreaper.net> or WebWhacker <<http://www.bluesquirrel.com/products/webwhacker/>> can be used to reap or whack entire sites or as much of them as desired. These downloaded sites can then be copied to the designated Internet computer. WebReaper especially resets the links on the downloaded pages so that interaction on the Internet computer works exactly as it would be live on the Net. In fact, the interaction is even faster since the pages are stored on the computer's hard disk.

In addition to the plusses and minuses listed above, the biggest problem faced by many developing countries like Vietnam in integrating the Internet into the EFL classroom is the financial barrier. On the theory, the Internet solves the barrier of time and space (Kirkpatrick, 2002). However, it is important to keep in mind that though universal access is possible from the technical point of view, social, economic and geopolitical reality proves that the Internet can never be available to everyone in the world (Thorne, 2008a; Warschauer, 2003). The digital divide is still one of the most prevalent barriers. A recent annual study <<http://www.internetworldstats.com/asia.htm#vn>> by the Internet world statistics (2008) shows that in spite of being ranked among the top 10 Internet countries in Asia (Figure 2), only around 23% of the Vietnamese population of nearly 85 million have access to the Internet (at home, but mainly at offices or Internet cafes in big cities), and 80% of these Internet-assessable people are city dwellers while Vietnam is still considered an agricultural nation where approximately 70% of the population live on the farm.

The cost for technological equipment is probably the greatest obstacle to the acceptance of technology (Warschauer & Meskill, 2000) in most Vietnamese educational institutions. The number of college students who are not able to access the computer or the Internet is still large. Although each high school in cities has a computer room with the Internet

facilities, it can only accommodate 50 out of several hundreds of students at a time. This problem still remains, but with the increasing budget from the central government and the local educational boards, and the price of the computer coming down significantly, it is possibly expected that in the near future the financial problem of hardware cost in Vietnam can be solved. Moreover, the investment can be justified by the students' higher level of achievements attained with the support of technology.

Regarding educational software, one of the greatest facilitators of Internet use has been the growing application of course management software (CMS) such as Blackboard <www.blackboard.com>, Prometheus <www.prometheus.com> and WebCT <www.webct.com>. These products allow automated or semi-automated creation of course web pages, allowing faculty to easily post syllabi, class announcements, resources and reading materials, and to communicate with enrolled students in the class.

In Vietnam, the availability of high quality EFL software is a very pressing challenge in applying the new technologies because of their high costs. The local software development is also high-priced and time-consuming, and most importantly these programmers are often not pedagogically professional. However, this problem can be partly solved by using freeware which is designed for language education and can be obtained via the Internet. For the time being, it is highly recommended the free software entitled Moodle as quoted by the producers, "Moodle is open source and completely free to use" <<http://moodle.com/>>. Moodle has been used widely by teachers from many countries the world over. It is a valuable tool not only for English, but also for the other foreign language departments, e.g. French, Russian, Chinese, and Japanese, because it can handle up to 35 languages.

6. Conclusion

I would argue that the Internet technology facilitates the ten principles on critical pedagogy introduced by Crookes and Lehner (1998) in terms of syllabus design and materials development. An important use of computers for language teaching and learning is resource retrieval. The Internet includes the broadest array and the largest amount of information ever assembled on earth. So far information provided via the Internet could be seen as authentic and up-to-date teaching and learning materials. However, due to the nature of the subject matter, these resources and materials need expert help if they are to realise their potential. As language teachers we should bear in mind the fact that, like any other resources or teaching aids, the Internet in general, multimedia texts or hypertext in particular, cannot organise or run a lesson, the teacher is clearly a crucial element in the success or failure of a lesson. It is the teacher who ensures the context for learning and who chooses the materials to suit the learners' needs. In other words, online teachers need to process a variety of novel strategies to incorporate in their lesson plans (Romiszowski & Mason, 2004). The WWW is useless without careful choice and preparation of materials; so careful lesson planning and classroom management, and training of both learners and teachers are surely needed in order to exploit the best educational opportunities of using the Internet in language teaching and learning.

The challenge for educational developers is to use this knowledge to design appropriate curricula which promote an active approach to learning so that what students learn is a deep understanding of the subject content, the ability to analyse and synthesise data and information, and the development of creative thinking and good communication skills (Alexander, 1995). Also, it is important not only for language teachers, but also syllabus designers to realise to what extent the use of the Internet technology influences TESOL syllabus design as well as integration issue of CALL into the curriculum as a whole. Technology is essentially powerless without creative and imaginative application.

Finally, it is obvious that new methods and curricula associated with the Internet technology have profound significance for social, economic, and cultural life in the present and the foreseeable future. Recent and ongoing global trends have brought EFL and technology into complex relationships. Being able to understand these relationships and to develop learning programs and methods from them is seen as crucial in order to meet the educational requirements for viable and expansive futures from the personal to the (inter)national level. Above all, what we really need is to expand the learning process "... from what the technology can do for the student to what the student can do with the technology" (Godwin-Jones, 1999, p. 49).

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Appendices

Table 1. Ten principles of critical pedagogy (Crookes & Leher, 1998)

No.	Principles
	The purpose of education is to develop critical thinking by presenting students' situation to them as a problem so that they can perceive, reflect, and act on it.
	The content of curriculum derives from the life situation of the learners as expressed in the themes of their reality.
	Dialogue forms the content of the educational situation.
	The organization of curriculum recognizes the class as a social entity and resource.
	The learners produce their own learning materials.
	The task of planning is, first, to organize generative themes, and second, to organize subject matter as it relates to those themes.
	The teacher participates as a learner among learners.
	Teachers contribute their ideas, experiences, opinions, and perceptions to the dialogical process.
	The teacher's function is one of posing problems.
	The students possess the right and power to make decisions.

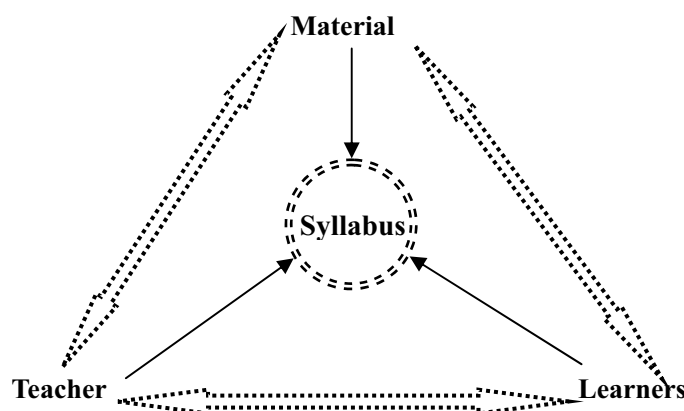
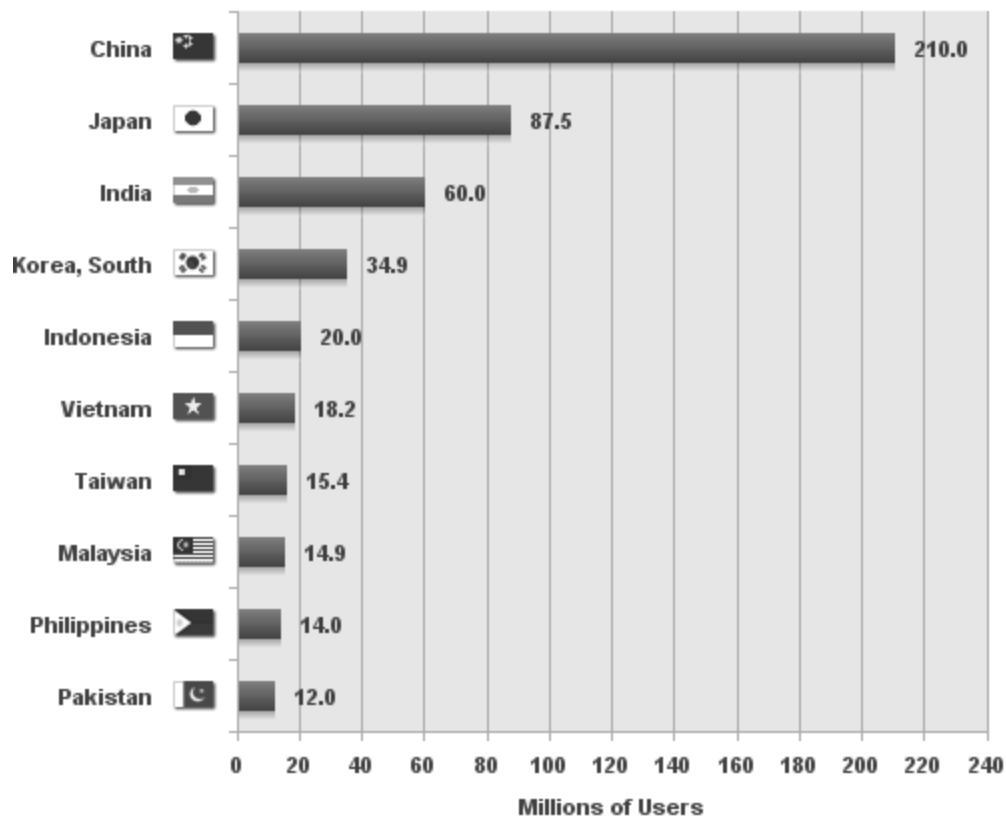


Figure 1. Critical factors affecting the syllabus design

Asia Top 10 Internet Countries December 2007



Source: Internet World Stats - www.internetworldstats.com
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Figure 2. Asia top 10 Internet countries (Source: Internet World Statistics)